

## Appendix A Scoping Summary

This document shows how public comments were categorized into significant issues, non-significant issues, and non-issues by the interdisciplinary team. It includes analysis of non-significant issues where needed, answers to questions, or further clarification.

An issue is a point of debate with a proposed action based on some anticipated effects. A significant issue is based on extent of geographic distribution, duration of effect, and intensity of interest or conflict generated. According to the Council on Environmental Quality (CEQ) regulations, significant issues are neither correlated to nor the same thing as significant effects. Significant issues are analyzed in detail in the Preliminary Environmental Assessment (EA).

Non-significant issues are issues that are 1) not within the scope of the proposed action, 2) not relevant to the decision to be made, 3) are already decided by law, regulation, or policy, or 4) are conjectural or unsupported by the scientific evidence. Issues about effects that can be mitigated through further clarification of the proposed action, design features and mitigation measures also are not significant issues.

Non-issues are comments that do not debate an effect. They can be statements of opinion, preferences, or questions about the proposed actions.

### Significant Issues

#### **Young Forest/ game habitat**

**Comment:** *Habitat for wildlife species should be among the primary considerations during forest management activities. While the 1854 Authority supports management activities that provide habitat for all species, our constituents are particularly concerned about game species such as moose, deer, and grouse. Band members exercising treaty reserved rights to hunt generally key on these three species within the 1854 Ceded Territory, and as such have a great deal of interest in their management within the Superior National Forest. The project's objectives include an increase in older conifers, and would eventually decrease the amount of young forest from the current level of about 10% to 2-7%. The 1854 Authority is concerned that these shifts may negatively impact populations of game species in the long-term. Darren Vogt, 1854 Authority*

**Comment:** *We will not provide citations that substantiate the value of dense young forests for wildlife. Forest Plan revision documents, including biological assessments, suggest that the Forest Service is fully aware of the need to provide this habitat type. In fact, we appreciate the reference to the needs of grouse and other game animals in the Purpose and Need of the project.*

*We appreciate the recognition of the need to create young forest in this project area. However, an emphasis on increasing the spruce-fir component of the area should not*

*necessarily dictate a concurrent decrease in the amount of young aspen. Currently about 9% of the aspen in the project area is in the 0-9 age class. Good game management would dictate that 20% would be young forest. This project will reduce that amount to around 3%. Please consider an alternative that will maintain the amount of young aspen in the project area while meeting the spruce-fir desired conditions. Rick Horton, Ruffed Grouse Society*

**Comment:** *Again, we appreciate the District's interest in providing for game species by maintaining a component of MIH 4. We recognize that the plan calls for a reduction in the amount of young forest from 10% to 2-7%. We urge the District to aim for the high end of that range with regards to aspen in order to provide the social and economic benefits of producing timber volume and game habitat. Rick Horton, Ruffed Grouse Society*

**Response:** Comments under the heading of significant issues are address with an alternative. In this case Alternative 3 was developed to address a higher percentage of young age class, bringing the Devil Trout area closer to Forest Plan objectives while still meeting the purpose and need as outlined in Chapter 1 (Preliminary EA section 1.4, items 3) of the Preliminary Environmental Assessment.

## Non-significant issues

### Hunting Access

**Comment:** *Clear-cut areas of the Superior National Forest are vital for the exercise of treaty rights in the 1854 Ceded Territory. Not only do these areas provide habitat for game species (moose, deer, grouse) preferred by band members, but they also provide locations for hunting opportunities. Band member hunters have expressed concern over blocking access to these cuts through activities such as constructing rock or earthen berms, ditching, or piling brush. It is our understanding that the Forest Service policy is to close temporary roads, such as accesses to clear cuts, after use is completed. Such closing is apparently happening more quickly in recent years, reducing band member access to hunting grounds. Of primary concern is access for moose hunting. Moose hunters use clear-cut areas for a period of several years after cutting is complete. Access to these cuts is crucial for the exercise of treaty rights. Band member hunters do utilize areas of the forest within the Devil Trout project boundaries. The 1854 Authority requests that the Forest Service consider the effects of closing clear cut accesses on Band members, and that such access be maintained. The Forest Service should consider treaty-right hunting activities as a use to be accommodated rather than a use to be curtailed. Darren Vogt, 1854 Authority*

**Response:** This issue was raised and addressed in the Forest Plan revision process. Appendix J (LRMP-EIS APP-J, PC # 2.2-7 pg. J-78) agency response outlines that temporary roads proposed to be constructed are intended for forest resource management purposes only. *"The National Forests intent is not to allow general public use to become established on temporary roads. Generally, prior to decommissioning, access by the*

*public is not encouraged due to concerns for public safety and possible Forest Service liability issues.”*

The Forest Plan gives direction for temporary roads as follows: “*New roads built for resource management... are not intended for public motorized use. Temporary roads will be decommissioned after their use is completed*” (LRMP pg.2-49, O-TS-3). “*Unneeded roads will be decommissioned and closed to motorized vehicles. Roads that are not necessary for long-term resource management are considered “unneeded”* (LRMP pg.2-49, O-TS-7). “*As soon as access is completed, stabilize temporary roads and effectively close them to motorized traffic. Vegetation will be established within 10 years after the termination of the contract, lease, or permit* (LRMP pg. 2-50, S-TS-3).

### **Quality Hunting**

*However, we do not feel that the amount of quality habitat is sufficient to produce sufficient habitat to provide for quality hunting experiences for the large segment of the public that pursue game on National Forest lands. Rick Horton, Ruffed Grouse Society*

**Response:** There is no scientific evidence to support the claim that the proposal would not provide sufficient habitat for hunting, therefore this issue will not be further analyzed. Hunting opportunities are provided at the landscape, State, or Forest level and analysis of impacts is relevant at that scale. There would not be a measurable change in hunting opportunities at the project scale. In the Record of Decision for the Forest Plan, the Regional Forester states:

“Over time, the Revised Plan will decrease the amount of aspen and young tree age classes and therefore may decrease the habitat for some game species... The actual change in habitat will occur over a long period of time and will be influenced by the habitat provided by intermingled private, county and state lands. In the shorter term (next 10-20 years) there will be minimal effects on populations as a result of this slow change in condition, and game species habitat is expected to remain fairly high during this period.”

### **Forest Health**

**Comment:** *The Superior National Forest experiences significant amounts of mortality. Forest Inventory and Analysis (2003) data show that the mortality on the forest exceeds 195 million board feet, annually. Present annual mortality accounts for 67 percent of the forests annual growth. A desired condition of the forest plan is “Resource conditions minimize undesirable fire, insect, and disease outbreaks...” (Forest Plan, p.2-19, 2004). An objective to achieve this desired condition is to “Increase the amount of forest restored to a healthy condition...” (Forest Plan, p.2.2-19, 2004)*

*The proposed actions in the scoping document fail to seriously address the forest health problems within the project area. There are approximately 31,500 acres of forest lands within the project area. Nearly 20,000 acres are beyond 60 years of age. The majority of the forests greater than 60 years of age are the forest types of aspen and birch.*

*The aspen-birch forest types represent 20,100 acres; of this amount nearly 13,000 acres are beyond the age of 60 years (61% of the type). It is well documented that aspen/birch forests in the Lake States deteriorate rapidly after the age of 50. Having such a large*

*amount of overmature aspen-birch will perpetuate insect and disease outbreaks and create conditions favorable to wildfire. Tim O'Hara, Minnesota Forest Industries*

**Response:** Harvesting 20,000 acres and creating young forest in an area the size of the Devil Trout project area would not fit within the Forest Plan guidelines. Landscape ecosystem (LE) objectives outline a desire for 10% in the 0-9 year age class for Mesic Birch/Aspen-Spruce/Fir (MBASF) LE (Table MBA-2 LMRP pg. 2-70). Further, the purpose and need for this proposal has outlined a desire for 2-7% in the young age class (Preliminary EA #1, page 6). The alternatives outlined in chapter 2 of the Preliminary EA meet the purpose and need for 2-7% in the young age class.

The U.S. Forest Service does not anticipate that the aspen and paper birch in aspen/paper birch typed stands older than 60 years in the project area will deteriorate all at once, a good number of those stands also contain maple, white pine, cedar, spruce, and balsam fir of all sizes and ages. This combination of species and the more productive soils in the Trout Lake area lend to their transition to other hardwood species that are more fire resistant. Our project is designed to aid in that transition with partial cuts and some planting. Intermixing white pine and white spruce are expected to fit in with the fire regime more typical for a hardwood forest (low intensity, understory type fires).

While not eliminating the threat of wildfire, Alternatives 2 and 3 place activities in locations that will reduce the threat to the communities around both Devil Track and Trout Lakes.

The Forest Plan through Landscape Ecosystem Objectives and Management Indicator Habitats has outlined that there will be mature, old forest, and old growth. Table NSU-3 (LRMP pg. 2-60) shows that for all upland forests, an increase is desired in 100-149 age class. All growth stages, including old forest, are part of a healthy ecosystem. The effects of maintaining 10% young in the MBASF LE and from retaining higher amounts of older forest are outlined in the FEIS for the Forest Plan in Chapter 2 (pg 3.2-76 through 84). Because the Forest Plan has outlined the percent of young age class to be maintained, as well as determined there would be older forest, this issue will not be analyzed further (LRMP D-LR-4 and EIS 3.2-7).

### **Economics of Partial Harvesting**

**Comment:** *Besides the need for the Devil Trout project to produce timber volume, there is a need to do it in a manner that allows loggers and operators to realize sufficient income to sustain themselves. Many loggers and truckers are members of the Cook County ATV Club, and they, and we, would like to see you select the "Clearcutting with Reserves" prescription which would be more economical for timber operators. Less time would be spent trying to extract marked trees than in uneven-aged prescriptions. The "Clearcutting with Reserves" would also reduce damage to the trees left in reserve. Rhonda Silence, Cook County ATV Club*

**Comment:** *We do not support the partial harvest of aspen stands. Specifically, the district recommends partial cutting on approximately 570 acres of aspen. The*

*regeneration goal on approximately 290 of these partial cuts is aspen. We recommend that the district harvest aspen stands with proven silvicultural practices, i.e. clear-cut with reserve. This is strongly recommended for those stands that are to be regenerated to aspen. Tim O'Hara Minnesota Forest Industries*

**Comment:** *Besides the need to produce timber volume, there is a need to do it in a manner that allows loggers and operators to realize sufficient income to sustain themselves. The Clearcutting with Reserves prescription is more economical for timber operators than uneven-aged prescriptions as less time is spent trying to extract marked trees while reducing damage to reserved trees. Rick Horton, Ruffed Grouse Society*

**Response:** The decision to partial cut some aspen has been outlined in the Forest Plan (LRMP pg 2-21, Table G TM-7), and is also discussed in the Record of Decision (LRMP-ROD pg 22), and therefore will not be reanalyzed at the project level. Further, the purpose and need (P&N) for this project outlines that we will be using techniques around the large patch near Trout Lake to move it toward longer lived species for both ecosystem and visual reasons (Preliminary EA P&N #2 and P&N #11, pages 1-7 and 1-11). However it should be understood that for this proposal, the partial cut prescription would be applied to approximately 435 acres treatment acres of aspen not 570 acres.

The U.S. Forest Service acknowledges that clear-cutting aspen is a common silvicultural treatment used for regenerating young aspen and that it is the most economical for loggers. However, partial cutting is a technique becoming common across the Lake States and the northern continental United States. There are several reasons the partial cutting of aspen is being proposed. The primary reason is to retain some of the over-story maintaining an adequate level of scenic quality. One of the purpose and needs of the Devil Trout project is to maintain or enhance scenic quality along the Gunflint Trail and Trout Lake Road. The Gunflint Trail is designated as a Scenic Byway and the Forest Plan identifies it as having High Scenic Integrity Objectives. Some of the existing stands are in decline (dead and dying) and pose a threat to long term scenic quality that would not meet the desired condition. There is a need to increase long lived species such as white pine and/or spruce and add variety to the landscape through increasing pine. It has been proven that retaining a partial canopy of aspen will decrease aspen suckering and the mortality of the white pine seedlings we proposed to interplant in those stands (D. Stone and J. Eliooff, March 24, 2000).

### **Use of Prescribed Fire as Management Tool**

**Comment:** *The Agency should embrace the use of fire as a critical forest management tool. Prescribed burns are a proven tool for alleviating high risk wildfire where it could threaten homes and communities, and the reintroduction of fire is an important management tool that can mimic ecological processes, reduce the buildup of high fuel loads due to past fire suppression, and lead to the restoration of forest stands. Fire ecologists and most forest scientists agree that long term ecological restoration with careful fire reintroduction – not increased commodity resource extraction or aggressive fire suppression – holds the best hope of preventing future large-scale severe wildfires in fire dependent ecosystems. Toward that end, hand release and prescribed burns should*

*be used on as many acres as possible where fuels reduction is necessary or where fire is needed to achieve restoration goals. Commercial logging is not and should not be viewed as a tool for reducing wildland, home, and community fire risk or for achieving forest restoration objectives. Josh Davis, Sierra Club*

**Response:** While the U.S. Forest Service agrees that prescribed fire is a critical forest management tool, the decision to use logging for fuel reduction and forest restoration was made in the Record of Decision for the Superior National Forest Plan (LRMP-ROD pg 14). The forest plan also gives direction to use timber management as a tool to emulate naturally occurring disturbances (LRMP pg 1-9). The forest plan also directs the managers to use prescribed fire to mimic the effects of natural fire (LRMP pg 1-9). There are 300 acres of prescribed fire being proposed in the project area.

The purpose and need for The Devil's Trout project includes creating young age class, emulating natural disturbance patterns, reducing fuels hazards in appropriate areas, improving condition class and re-introducing fire into certain stands. Techniques include harvesting and prescribed fire to improve condition class (see definitions in the Preliminary EA for condition class), reduce fuel loadings, and mimic landscape disturbance patterns. Both prescribed fire and harvesting methods have been proven to be effective at reducing hazardous fuels. Fuel reduction is a matter of removing the fuel that has accumulated on the site, in which case, both prescribed fire and harvesting are effective at removing the fuel accumulations.

Prescribed fire and harvesting methods do emulate fire disturbances differently. For example, harvesting is not as effective at recycling nutrients back into the soil as prescribed fire is. However, harvesting can mimic natural patterns of fire through various types of harvesting (i.e. thinning of pine stands that would naturally have low intensity fire that would have thinned stands) and through the design of leave islands in clearcuts, that would have not burned in natural wildfires.

There are situations where prescribed burning would not be a good tool to use and mechanical treatments are needed instead. Fuel accumulations are beyond their natural levels due to a lack of fire; therefore harvesting methods are needed as a primary treatment method to reduce fuel loadings to an acceptable level. Then we could potentially allow fire to burn within its natural range. Without the harvest as the primary treatment, fires would burn with higher severity than historically and would have adverse effects on the environment.

As is important, prescribed fire as a management tool is limited in the extent it can be used due to weather and resource values. In northern Minnesota, there are typically 8-12 days per year that are optimal for conducting prescribed fire. This limits the amount of prescribed fire that can take place in a year. The use of fire as a tool is therefore prioritized in areas where fire will be the most effective tool at meeting objectives for an area.

### **Non-market Public Benefits**

**Comment:** *The District should do an economic analysis that gives fair consideration to non-motorized recreation, old-growth forests and ecosystem restoration as economic generators. Net benefit to the public should be considered, as well as net present value or cost/benefit ratio. NPV does not reflect value to the public accurately; only to timber buyers. Neither does cost/benefit analysis, which measures only benefit to the agency. These indicators commonly ignore the jobs and local economic inputs created by restoration activities such as underplanting and prescribed burning, and only refer to these activities as lowering the benefit/cost ratio. These activities will result in having more attractive land for the public to enjoy while hiking, hunting, or wildlife-watching, and this analysis ignores these future benefits. The Forest Service should make a good faith effort to estimate non-market benefits for recreation and preservation values and include them in their EA analysis. Josh Davis, Sierra Club*

**Response:** We believe that the economic impact analysis presented in Appendix E of the Preliminary EA is adequate, given the role of economics in the decision. Further, we believe that the project level is neither appropriate nor effective for displaying the net public benefits of the decision. The appropriate level is the Forest Plan.

The decision is intended to move the project area toward the desired ecological conditions described in the Forest Plan (pages 2-70/71, 3-10, 2-45, 2-27/28, 2-22/23, 2-19/20; also Preliminary EA pages 1-6 thru 1-10). Economic outputs are secondary. The economic impact analysis meets requirements for disclosing economic impacts in such circumstances (FSH 1909.17, 15.5 & 20).

Non-market benefits are important, but neither NEPA nor NFMA require that they be quantified. The NFMA discourages choosing alternatives based primarily on greatest dollar return or greatest unit output in determining net public benefit. (See 40 CFR 1502.23, and 16 USC 1604.). In fact, we agree with the comment that NPV calculations are not adequate in making choices related to the relative values of resources in particular areas. That is why the design of this proposal devotes substantial consideration to visual quality along the Gunflint Trail and in the Trout Lake area, as well as consideration for TES species in both broad spatial design and site specific prescriptions (see Preliminary EA pages 1-6 through 1-12). Note that despite past harvests at levels equal to, or exceeding, the current proposal, recreation use on the Forest has been increasing (Forest Plan Table APP-A6, Recreational Visitor Days by Forest, pg. A-41). This suggests vegetation management is not incompatible with recreation activities, at the Forest scale. Results from the National Visitor Use Monitoring Survey (2001: Tables 17-19) show a high level of satisfaction with “Condition of the Natural Environment” and “Attractiveness of the Forest Landscape.”

Finally, the changes that might be expected at the project scale are relatively small. Given the complexity and uncertainties of non-market valuation methods (Turner, Pearce & Bateman 1993: 108- 127) detailed analysis would add little of value to the decision. Trends at a more appropriate scale, such as the entire Forest, are more meaningful and

have been assessed in the Forest Plan Final Environmental Impact Statement (LRMP-EIS pp. 3.9-1 to 58).

### **Maintain Access**

**Comment:** *Please maintain as many system roads as possible to provide access into the forest for sport hunting and big game retrieval. Rick Horton, Ruffed Grouse Society*

**Comment:** *As a non-profit group dedicated to providing enjoyable all-terrain vehicle riding experiences while protecting the land, we encourage you to consider an alternative that maintains as many system roads as possible and reviews this area for potential links to other ATV trails.*

*Maintaining these roads will not only provide access into the forest for sport hunting and big game retrieval, but some very enjoyable ATVing opportunities.*

*The Cook County ATV Club would like to see evidence that the Gunflint District has consulted with the Minnesota Department of Natural Resources Division of Trails and Waterways on any potential trail connections. Rhonda Silence, Cook County ATV Club*

**Response:** OHV planning is outside the scope of this project. Transportation planning for the Devils Trout project focuses only on the roads needed to access those stands being proposed for vegetation management treatments. Further planning for recreation will be done at a future time to better coordinate with areas outside of this vegetation project area boundary.

For consideration and response to concerns about temporary roads and closure following management activities, please see our response outlined above for **Hunting Access**.

### **Riparian Zones**

**Comment:** *The scoping document sets direction for management within riparian zones, but clearly ignores the needs of species that require young forests in moist soil environments, like American woodcock. Emphasis on conifers and old-growth in riparian areas also ignores the natural disturbance regimes in this area. Windstorms and large-scale fires do not respect man-made boundaries around lakes and rivers. Their impacts were often felt right up to the water's edge. It is not acceptable for the Forest Service to base the entire 2004 Plan on natural disturbance regimes, yet ignore this simple point. We ask that clearcut units adjacent to riparian areas be allowed to extend to the waters edge to a degree. Set guidelines regarding slope, aspect, season of harvest and size of footprint (10% per mile?) and allow creation of woodcock habitat in this project. Rick Horton, Ruffed Grouse Society*



---

**Response:**

On the Superior National Forest primary breeding habitat for the woodcock includes grass-forb-shrub openings, shrub wetlands and aspen/birch forest under 20 years old, but the declining woodcock populations in Minnesota, the Lake States and the Central woodcock management region (larger area than Lake States), suggest the habitat on the National Forests in Minnesota is important but its more complex than the forests comparison of the young aspen/birch forest suggest, since this habitat is plentiful on the SNF yet populations decline. Currently, habitat conditions for this species on the Superior would appear to be the best they have been in 40 – 50 years (USDA Forest Service 2000h).

The Devil Trout analysis area is not promoting American woodcock habitat along lakes, streams, ponds, etc. Habitat already exists compounded by the fact the 2004 Forest Plan does not focus on single species management. It takes a course filter approach in managing species looking at management indicator habitats (MIH). The American Woodcock is associated with MIH 2 – upland deciduous forest; MIH 10 – upland riparian forest; and MIH 11 – upland edge habitat (management induced) (LRMP-FEIS, Vol II; Appendix D, Table DEIS – 9). This approach looks at vegetation composition, structure, age, tree diversity and social objectives which is compatible and complementary to Landscape Ecosystem (LRMP pg. 2-35,).

With that said, the land adjacent to many of the streams within the DT analysis area is currently lowland brush and hummocks. The Forest Service would not promote any timber harvesting within this area and would support maintaining a riparian management zone along most of these streams and lakes. One of the desires in the Forest Plan is to promote riparian areas as landscape connectors. They support native and desired non-native wildlife and plant species that provide bank stability. A multi-layered forest canopy in riparian areas provides shade, leaf litter and coarse woody debris to streams, wetlands and lakes as well (LRMP D-WS-10; pg. 2-10). The Forest Service will implement Forest Plan standards and guidelines which incorporate Minnesota Forest Resources Council (MFRC) Voluntary Site Level Forest Management Guidelines (LRMP S-WS-4; pg. 2-13).

## **Response to questions, non-issues and comments noted**

### **Scenery**

**Comment:** *Other questions arise concerning the objective to increase mature conifer cover. While many may consider mature conifers scenic, others would consider increased opportunities to see moose and other wildlife attracted by young forests along the road as equally scenic or even more desirable. The long-term objectives of many of the proposed treatments are unclear. A number of compartments and stands (111-23, 144-23, 148-5, 191-6, 192-17, 200-10, 200-22, 200-25, 208-16) include a prescription to plant conifers, mostly white pine. Yet the regeneration forest types do not list these species. Darren Vogt, 1854 Authority*

**Response:** The author suggests that moose viewing may be more preferred to conifer. However, the area of the Gunflint Trail from the South Branch of the Brule River to Swamper Lake has mixed conifer, aspen, birch stands and is well known for moose viewing. Our experience has shown that moose use mixed stands, including stands with mature conifer. Introducing mixed stands should improve moose habitat and provide the scenic character of both mature conifers and moose.

The Devil Trout project area contains many sites that are suitable for growing white pine that currently are comprised of aspen which can be difficult and costly to convert. The 2004 Superior National Forest Plan encourages creating more within stand diversity and establishing long-lived tree species within the MBASF LE and MIH (pgs. 2-70 thru 2-72). The Forest Plan also states that in a High Quality Scenic Area, such as the Gunflint Trail, the desired conditions are to encourage vegetation diversity and enhance big-tree appearance while retaining an adequate level of visual quality (pg 2-45).

The stands in question you listed above move toward the desired conditions from the Forest Plan, creating a more diverse forest, establishing long lived tree species and big-tree appearance while retaining scenic integrity. The U.S. Forest Service does not intend to convert the forest type in those stands you listed above to the forest type of the planted species. The primary objective in those stands is to establish more diversity through interplanting and/or planting in only specific regions of the stand.

#### **Wild Rice**

**Comment:** *The 1854 authority notes that at least two lakes (Elbow and Northern Light) within the project area contain wild rice. This important resource must be preserved and protected, and we support activities that enhance wild rice in the 1854 Ceded Territory. It appears that proposed activities will have no effect of Elbow Lake. Prescribed burns are proposed in locations adjacent to Northern Light Lake. Effects on wild rice are unknown, but perhaps may be beneficial. Treatments to the north of Northern Light Lake should remain protective of the lake's riparian area. Darren Vogt, 1854 Authority*

**Response:** Wild rice was planted on Elbow Lake and Northern Light Lake in the early 1990's as part of wildlife habitat improvement program on the Gunflint Ranger District. The proposed prescribe burns would take place in the spring before "green-up" thus having minimal to no effects on young rice plants, more than likely they have not germinated yet; and as stated in the scoping letter, the wild rice would benefit from a short-term increase in nutrients in the ash produced by the fire. Any treatment work within the riparian management zone along the north shore of Northern Light Lake would be hand planting. Effects would be minimal in scope.

#### **Fuels Hazard/ Suggestions**

**Comment:** *Re: p9, 1st par. I've wondered for years why the USFS hasn't gone in w chain saws and cut down the dead balsam. What would it take to do the job: ~ca. 30 person-days?*

*An interesting scope. Supports, by and large, what we have been trying to do over the past 4 decades or so at Hungry Jack Lake. My chief disappointment: failure to get young birch going.*

*Most of what I plant dies in a year or two. Suggestions welcomed. Henry Bent*

**Response:** In regards to the comment pertaining to the hand piling and burning of dead balsam, this practice is a time consuming and expensive procedure for treating dead balsam areas. It takes approximately 1 person day to pile and burn ½ acre (cost/acre) of an area with an average loading of dead balsam. Due to limitations on time and budget necessary to complete these types of treatments, it is difficult to plan too many acres within a year. The practice is generally used to reduce hazardous fuels in areas of critical concern, such as around homes, businesses or areas of high risk but also high concern for visual quality. As an example, this method was used on the Kawishiwi Ranger District around the Kawishiwi River summer homes. It is also currently being used near private property areas near Isabella.

Currently, the Superior Forest is involved in a research project to determine other cost-effective ways of reducing understory hazardous fuels, especially dead and dying balsam accumulations in the understory of healthy stands.

In regards to the comment pertaining to young birch, the Minnesota DNR, Cook County Soil and Water Conservation District, and the U.S. Forest Service would be glad to provide information regarding tree planting or other forestry related questions. Stop in one of the offices listed or contact by telephone.

### **Forest Management Advice**

**Comment:** *Appears to be a good long range management program. Appreciate the attempt to keep a tree buffer along county roads for aesthetics. We have more or less 3 acres on Devils Track Lake, is woodlot management advice available? Richard Gongoll*

**Response:** Yes, woodlot management information can be obtained by contacting the Minnesota DNR in Grand Marais, 218-387-3037.

### **Treatments**

**Comments:** *How does a clear cut differ from the clear cut/seed tree cut/shelter wood that is proposed in the Kimball Creek road and Kimball Lake areas (191-3; 191-13; 191-24; 191-?0; 198-19; 198-33;). If those areas are simply a clear cut that is quite extensive in my mind. Allen Lipke*

**Response:** The 2004 Superior National Forest Plan objectives for the Mesic Birch/Aspen/Spruce/Fir landscape ecosystem encourages the use of vegetation management to convert some forest types from one to another and also to create young age class of existing forest types (LRMP pg.2-70 to 2-72). To accomplish those objectives, clear-cut with reserve trees, seed tree cut, and shelter wood cut are the appropriate silvicultural treatments in those stands you listed. Definitions for each of those treatments are outlined in the Preliminary EA (Table 2.3 pgs. 2-8 thru 2-11).

Unit “198-33”, shelterwood cut, is being proposed to achieve the objective to create young birch seedlings. Reserving approximately 20% of the healthiest paper birch throughout the stand will create the natural seed and shade necessary to regenerate young paper birch. Unit 198-19, clearcut with reserve trees, is being proposed because the objective is to convert a decadent stand of aspen and paper birch (that is currently turning to brush species) to a stand of white spruce, balsam fir, paper birch, and aspen. In units “191-3, 191-24, 191-13, 191-30” the clearcut with reserve trees is being proposed to achieve the objective in that region of a less fragmented young patch of forest.

### **Riparian Areas**

**Comment:** *I recently toured the Isabella project and thought that the proposal had been thoroughly studied. I would be concerned about riparian areas in the logging process. Allen Lipke*

**Response:** We are aware of the effects that harvesting timber can have on riparian areas. We follow standards and guidelines from the 2004 Forest Plan, Minnesota Forest Resources Council (MFRC), federal laws and regulations. These are described in Appendix C, Standard Management Requirements. Additional site-specific mitigations to minimize the negative effects and they listed in Appendix D. Also see the monitoring requirements listed in table 2.4, chapter 2 of the Preliminary EA.

### **Insect and Bird Habitat**

**Comment:** *The areas seem to be in smaller units which should avoid fragmentation as much as possible. I also feel that it is important to leave those trees that are already past a marketable stage standing, not to push them over. Those trees are an important source of insects for various bird species and are of no value to the logger. Allen Lipke*

**Response:** The U.S. Forest Service agrees that dead standing trees and snags are important to retain because they provide an excellent source of forage and habitat for birds. In those stands where the Devil Trout project proposes to harvest, most of the dead standing trees or snags will be left intact, except in specific cases where they are a hazard to loggers, roadways, or recreation trails.

### **Erosion**

**Comment:** *I would like to see someone being more watchful at building sites along rivers and lakes. The road projects are monitored nicely but the private citizens building on sites close to streams and rivers are causing excessive erosion. The sediment load being carried out into Lake Superior increases every year. Allen Lipke*

**Response:** Your concern is understood, however, the U.S. Forest Service has no jurisdictional authority to monitor developments on private property. Throughout most of Minnesota, the State and local governments have oversight responsibilities for regulating private development.

### **Leo Lake Boat Landing**

**Comment:** *It may be inappropriate but I am going to complain about the boat landing on Leo Lake and its lack of attention. It is used all summer by area resorts, multiple groups daily, boats left on the landing, erosion into the lake, litter, cars parked along the road and I won't go on. Allen Lipke*

**Response:** Your comment has been forwarded to appropriate personnel who have responsibility for recreation maintenance on the district.

### **Trout Lake Area Burns**

**Comment:** *Interested but mostly want to know of any burns, in future, in vicinity of Trout Lake. Robert L. Marovelli*

**Response:** Burns proposed in the Devil Trout project are the only known prescribed fires planned in the Trout Lake area in the near future. Unless a natural disturbance occurs such as an insect infestation, disease outbreak, or blowdown the Forest Service does not foresee any burning needed in the vicinity of Trout Lake. We will ensure you are included in notification for burns planned in this vicinity.

### **Forest Health**

**Comment:** *MFI supports the notion of larger forest patches across the landscape. MFI recommends that the district develop larger patches through active forest management. Managing large blocks of mature to overmature forestland will improve forest health, meet the patch requirements of the forest plan, and provide economies of scale for many loggers. We also support grouping of harvest units near recently harvested areas to increase patch size. We do not support reserving large areas from management that are overmature and represent forest health threats. Tim O'Hara, Minnesota Forest Industries*

**Response:** Devil Trout project is designed to fit within the desired conditions and objectives of the Forest Plan as well as the purpose and need outlined in the Preliminary EA. D-LR-4 from, the Forest Plan desired conditions for Forest Health and Disturbance Processes reads: Stands in this MA are a mix of young, even-aged and older, multi-aged vegetative growth stages of the landscape ecosystem within which they lie. A mosaic of young to old (1-250 years) trees dominates these areas. Insect and disease outbreaks are evident, but are managed to be within historical, natural levels in terms of longevity and area impacted (fulfilling ecosystem function).

The majority of the Devil Trout analysis area falls within the General Forest Longer Rotation Management Area (MA) from the 2004 Forest Plan (pg. 3-9). This area will generally have longer rotations and more uneven-aged and partial cut harvests. When clearcutting is used it is generally done at longer rotation ages. Devil Trout predominantly falls within the Mesic Aspen Birch Spruce Fir Landscape Ecosystem (LE) and Spatial Zone 2. Each project, including Devil Trout analysis area, will contribute to meeting the landscape ecosystem, spatial and management area objectives based on opportunities found within the analysis area. Establishing large patches of mature forest by maintaining existing mature patches and creating large patches of young forest that will become large mature forest patches is a desired condition of Spatial Zone 2.

As mentioned in our purpose and need section (Chapter 1), our proposal will look to enhance the larger, older patch in the vicinity of Trout Lake with a variety of treatments. The proposal also spatial objectives for young cohorts through techniques the author has suggested.

### **White Pine**

**Comment:** *MFI supports the reestablishment of more pine on the landscape. Accomplishing this task without the use of herbicides and deer predation is extremely difficult and costly. MFI requests that the district provide the per acre costs of white pine reestablishment being recommended for the project area. Tim O'Hara, Minnesota Forest Industries*

**Response:** We are aware of numerous areas throughout the project area where deer browse could be an issue when trying to establish seedlings, however we do have some success, white pine planted in the Gunflint Pines area is one example. In those areas where deer browse is evident we will apply the appropriate techniques to protect the planted seedlings, such as spaying the seedlings with natural deer repellent and using tree cages.

We have displayed the cost of establishing planted species for this project in the economic analysis for this project (Appendix E). Acres for release or deer protection will be monitored and implemented based on site specific needs.

### **Treatment Acres**

**Comment:** *The scoping information, in table one provides a listing of proposed treatments. However, the text that describes the table states that the actual harvest acres would be at least 10 percent less than the figure shown. We recommend that the district treat entire stands during harvest operations. Tim O'Hara, Minnesota Forest Industries*

**Response:** Our attempt is to demonstrate all information we've learned with past experience. It is not a standard practice to simply reduce acres treated, however it is common that not all acres inside stand boundaries are treated and many factors contribute. It is common to have some differences between GIS calculations of stand acres and actual layout. These are often due to Standard Management Requirements and mitigations that reduce treatment acres, such as not harvesting on inclusions of lowland, soil mitigations, wildlife mitigations, recreation mitigations, and limits on operability.

### **Hand Piling & Burning**

**Comment:** *The district proposes hand piling and burning of 130 acres of aspen and red pine stands. Please provide the rationale for this decision. MFI recommends that the district assess the marketability of these stands prior to burning them. There may be opportunities to salvage timber volume and meet the objectives of the EA. Tim O'Hara, Minnesota Forest Industries*

**Response:** The Devil Trout project proposes to hand pile and burn approximately 35 treatment acres not 130 acres.

The District Ranger and District Fuels planner have had discussions with local members of the timber industry concerning merchantability of undersized forest products. As well, there is a research project occurring on the forest that is exploring options for utilizing the understory materials. However, currently there is not a market for the material.

In those stands proposed for hand piling and burning, only the understory fuels will be piled by hand crews and burned under appropriate weather conditions. The overstory of the stand will be left undisturbed. The objective is to reduce understory hazardous fuels that have accumulated. Typically the understory fuels that are being hand piled and burned are of little merchantable value. It is usually less than 5" dbh material that is dead or dying. The majority of the material has been dead for several years and has deteriorated beyond being merchantable. The material is usually balsam, which also has low merchantable value.

#### **Plant for Visuals**

**Comment:** *Would it be possible for those areas proposed for Handpile & burn--206--42, or Clear-cut 190-61, 191-3, 146-5 that border the Gunflint Trail, are within sight of the Gunflint Trail, or border the Trout Lake rd. to have the appropriate variety of Maple trees planted or seeded within the first 50 ft. or 100 ft. closest to the trail? Some Maples would provide more color variety in the Fall, enhancing the Gunflint Trail areas status as a Scenic Byway, therefore increasing the income of the lodges and businesses along the Gunflint and in town at a time when such business begins to wane following the summer. As I recall, the Scouts began such a program about 2-3 decades ago, and there are already small stands and individual trees that may have been a result of their efforts.*  
*Bob Barnabee*

**Response:** Some of the stands along the Gunflint Trail and Trout Lake road are comprised of aspen in decline (dead and dying) and are moving away from our long term scenic quality objectives. Your suggestion of maple regeneration would help transition to long-lived species and enhance visual quality. Generally we match species selection to soil and site characteristics and where the project area lies over the Gunflint Trail maple would be very difficult to establish because the soils are not ideally suited. Another complication is that where maples are suited, they generally are prolific at establishing young. Because of that, we do not collect seed and do not have any stock in our nurseries. We will plan to continue with white pine and spruce, but this may be an area we could accept some volunteer effort to attempt some maple regeneration.

#### **Desired Future Conditions**

**Comment:** *The Sierra Club supports restoration-oriented thinning of pine plantations and pioneer species forests. This activity is important to restore wildlife habitat and a more appropriate mix of forest types and age classes. However, please make sure the EA explains*

*what DFCs (desired future conditions) are for 30BA and 70BA partial cutting. Josh Davis, Sierra Club*

**Response:** Table 2.3 (Preliminary EA pg. 2-8 to 2-11) provide the objectives for each treatment including the partial cut stands. The stands prescribed with partial cut 30BA or 70BA are near the Gunflint Trail or the Trout Lake road, which are frequently used roads where people come to enjoy the scenery. The Gunflint Trail is designated as a Scenic Byway and the Forest Plan identifies it as having High Scenic Integrity Objectives. Some of the existing stands are in decline (dead and dying), and are moving away from the long term scenic quality objectives and would not meet the desired condition. There is a need to increase long lived species such as white pine and white spruce along with some hardwoods that would seed naturally, all of which will add variety to the landscape.

The desired future condition of the proposed stands prescribed with partial cut 30BA is to maintain or enhance long-term visual quality by retaining approximately one-third of the over-story, older age class, and mature larger wildlife trees. Aspen regeneration, in a clearcut can out compete other species. Leaving a partial canopy will inhibit some aspen and promote more shade tolerant species. The reduced amount of aspen suckering will help with the success of establishing the proposed planted species and at the same time the partial cut 30BA will allow enough room between the remaining trees to plant with long lived tree species.

The desired future condition of the proposed stands prescribed with partial cut 70BA is to maintain or enhance long-term visual quality by retaining approximately two-thirds of the over-story, older age class, and mature larger wildlife trees. Similar to the partial cut 30BA but leaving more residuals, this prescription will inhibit more of the aspen regeneration. The reduced amount of aspen suckering will help with the success of establishing the proposed planted species, and at the same time opening the canopy up partially will increase the growth of existing species such as sugar maple which will not to be harvested. Also similar to the partial cut 30BA, the spacing between trees after harvesting should be a sufficient to plant long lived species between.

### Analysis

**Comment:** *We encourage the District to set an example of how the Forest Service will advance forest plan goals in management project environmental assessments. Under the new forest plan, environmental assessments should include a table that includes this information for the project area:*

Forest type / age class	RNV	Current	After project	2015 goal (decade 1)	2025 goal (decade 2)	2055 goal (decade 5)

*Josh Davis (Sierra Club)*

**Response:** Comparisons to the range of natural variation (RNV) were done in the EIS for the 2004 Superior National Forest Plan (LRMP). Each alternative in the EIS had differing objectives for landscape ecosystems and management areas and those for Alternative E were selected for our Forest Plan. Therefore, the Devil Trout Preliminary



Environmental Assessment presents an analysis of how each alternative would meet the objectives the Forest Plan set as opposed to RNV. Those comparisons are presented in chapter 2 under 2.6 Comparison of Alternatives and Effects.

### **Cumulative Effects**

**Comment:** *Cumulative effects analysis should include actions planned in other logging projects in or adjacent the project area in the last ten years, in anticipated projects implementing the new forest plans, and in the North Shore State Forest Resource Management Plan. Josh Davis, Sierra Club*

**Response:** This environmental assessment and the analysis follow the direction provided by the Council of Environmental Quality (CEQ) for cumulative effects analysis. Please see appendix F in the Preliminary EA to review the actions on Forest Service, State, County and private lands that were analyzed for cumulative effects.

### **Soils**

**Comment:** *Scarification should not create large areas of bulldozed soil. We have documented Forest Service scarification projects that have resembled “rock-raking” methods that leave ruts and wide swaths of uncovered soil visible and vulnerable to erosion for years. While we understand bare soil may be needed to reduce competition for seedlings, managers must also remember that a healthy forest floor is required by many species that inhabit the forest types the Forest Plan is aiming to restore. Please consider this in analyzing mechanical fuels reduction plans. Josh Davis, Sierra Club*

**Response:** Each prescription is reviewed by a certified Silviculturalist to determine the best methods to achieve our reforestation goals. We continually review the latest research to adapt our approach with new information when appropriate. Our prescriptions follow Standard Management Requirements from the 2004 Forest Plan, Minnesota Forest Resources Council (MFRC), federal laws and regulations, and U.S. Forest Service policies, and specific mitigations to minimize the adverse effects all treatments can have on soil. After these treatments are conducted those stands treated will be monitored, and if any negative effects are evident they will be mitigated.

### **Non-game Management**

**Comment:** *Habitat for RFSS should be maintained or increased. This makes protection of all existing mature patches over 300 acres especially important. Given its RFSS status and population levels, spruce grouse should be much more a management concern than ruffed grouse. Josh Davis, Sierra Club*

**Response:** The SNF Land and Resource Management Plan (LRMP) recognizes the value of large mature patches across the landscape promoting well distributed habitats and restoring ecosystem function or processes across the landscape (SNF LRMP, pgs. 2-22 – 2-27). The Devil Trout analysis area is proposing to promote spatial patterns that more closely emulate the patterns that would result from natural disturbance processes and improve interior forest conditions. With maple dominating Trout Lake in the northeast

and the Candidate Research Natural Area in the southwest, the project area has two of the four largest patches in Spatial Zone 2. Along the Gunflint Trail there is a large mature patch (1000+ acres) that has little interior forest and many decadent aspen stands. The establishment of long-lived tree species and the consolidation of the canopy would improve the interior forest.

The strategy the SNF LRMP takes in maintaining, protecting and improving habitat for the Region 9 Forester's sensitive species (RFSS) is a landscape level (coarse filter) management strategy or a site-level (fine filter) management strategy (SNF LRMP, pgs. 2-31 – 2-32). Management Indicator Habitats (MIH) represent coarse filter habitats needed by a majority of species of management concern. Spruce grouse falls within MIH 5 - the upland spruce-fir forest; 8 - jack pine forest; and 9 - lowland black spruce-tamarack forest (SNF FEIS, vol. 2; pgs. D-1-D-70). It is also not a Superior National Forest RFSS but a Chippewa National Forest RFSS.

### **TES**

**Comment:** *Habitat for TES should be maintained or increased. The Forest Service should include cougar, a regular inhabitant of Minnesota forests, in its monitoring plan. Effects on lynx should be seriously considered. Josh Davis, Sierra Club*

**Response:** The Superior National Forest collaborates with the U.S. Fish and Wildlife Service (FWS) to properly implement regulations of the Endangered Species Act (ESA). This includes the fact that FWS provides the list of species that needs to be analyzed in a biological assessment. Further, the protocol for analysis is mutually agreed upon with FWS.

Eastern cougar is listed as endangered under the ESA. However, Appendix D of the FEIS for the Forest Plan (Table FEIS-8 pg. D-26) indicates that, according to the best available information, populations of cougar have been extirpated from the Superior National Forest. Furthermore, the FWS does not include cougar on the list of species with status that the Forest must consult on prior to project implementation.

Although stray individual cougars may occasionally visit national forest lands, there is no indication that populations of cougar exist on the Superior NF. Subsequently, there is no opportunity for the Forest to manage for population viability. In the event a population of cougar reappears on the Forest, the species would be protected by State and Federal statute. (Superior National Forest Plan Appeal Decision 8-8-05)

The direct, indirect and cumulative effects to lynx are considered in the Environmental Assessment, and the effects of proposed actions to lynx, and the determination of effects are addressed in the Biological Assessment.

### **Road Closure**

**Comment:** *The Agency must perform an adequate analysis of its road system. A complete analysis of all classified, unclassified, and other roads should be initiated prior to construction of any new roads and is necessary to comply with the requirements of the National Environmental Policy Act. Additionally, the agency must adequately demonstrate how the*

*agency will meet its obligation to evaluate roads in the project area after closure to ensure adequate re-vegetation. Further, the agency's current protocol with regard to closing roads is inadequate to prevent illegal road use and past experience has shown that ineffectively closed roads result in the conversion of temporary roads into permanent unclassified roads. Roads cannot be effectively closed by the mere use of gates or berms. The agency's proposal should call for the immediate obliteration of all unneeded roads in the project area, and must contain a plan that will adequately address the need for road obliteration, restoration, and the effects of excess road-building. Does the District intend to do roads analysis in this project area in a separate project? Josh Davis, Sierra Club*

**Response:** The Forest Service follows guidelines set forth under Forest Service Manual 7712.3 (Roads Analysis at Watershed and Project Scale) for this project.

Gates and berms have not been used on the Gunflint Ranger District for several years. Chapter 2 provides a list of the roads that will be constructed and decommissioned (obliterated) for each alternative. Standards used for decommissioning roads are outlined in Table 2.3 of Chapter 2 in the Preliminary EA. These road decommissioning techniques were originally identified in the Gunflint Corridor Fuels Reduction EIS and have been monitored for the past few years. The results have been displayed in the Superior National Forest annual Monitoring and Evaluation Report, which demonstrates that the techniques have been effective at closing roads to all motorized traffic.

#### **ATV & ORV**

**Comment:** *The Agency should study impacts of ATV access on the forest. We are concerned that the Forest Service is not maintaining an adequate ORV management plan or providing for the annual review of off-road vehicle management plans and designations, in violation of 36 C.F.R. § 295.2(b) and 36 C.F.R. § 295.6. How will ATV travel be prevented on temporary roads and non-motorized trails? Josh Davis, Sierra Club*

**Response:** Transportation planning for this project focuses on roads needed by proposed actions for this project and not trails; General OHV planning and monitoring is outside the scope of this project. Further planning for recreation issues will be done at a future time to better coordinate with areas outside of this vegetation project area boundary. A field review has been done on all roads within the project area and any needed actions will be taken using the appropriate forum.

#### **Lowland Treatments**

**Comment:** *We do not agree with the District's decision to only analyze two of the Landscape Ecosystems within the project area. This has the appearance of the district "cherry-picking" habitats to achieve internal goals. It does not allow the public to consider potential impact of upland treatments on lowland areas. For instance, a lowland conifer area lying outside the scope of this project may include an important wintering area for moose and deer. Good management would dictate creating and maintaining young hardwood feeding areas near these wintering areas to increase deer and moose survival. However, the gerrymandering of the area's boundaries masks that analysis. Rick Horton, Ruffed Grouse Society*

**Response:** The scoping package stated “The project area is predominately in the Mesic Birch Aspen LE. There is some Sugar Maple and Lowland Conifer LE in the project area but no actions are proposed in them” (Devil Trout Vegetation Management Scoping pg 4). Through an interdisciplinary midlevel review of the general area, we determine preliminary issues and concerns. We also look at various project level boundaries to determine the best fit for the issues or opportunities being addressed. There are a multitude of project boundary lines that could be drawn, but our decisions were based on Forest Plan desired conditions, by Management Area, Landscape Ecosystem, Spatial Zones, etc. to determine final project boundaries. Rather than look at a project area, species by species, the Forest Plan has incorporated all species into a strategic management concept. Our goal is appropriate Forest Plan implementation.

### **Game Habitat**

**Comment:** *We would like to see the following included in the Environmental Assessment:*

*Aspen and birch acres in ten year age classes before and after the project.*

*Amount of aspen converted and/or naturally regenerated back to aspen.*

*A section on hunting, including changes in habitat for ruffed grouse, woodcock, deer and moose; estimated impacts to game populations; and changes in forest access due to road closures. Speak with Jim Sanders on this topic as we have had this discussion and it was agreed to make this topic more transparent.*

*Evidence that the District has consulted with the Minnesota DNR Division of Fish and Wildlife and interested Chippewa Bands on the impacts of vegetation management on game population goals. Again, speak with Jim Sanders. Rick Horton, Ruffed Grouse Society*

**Responses:** Chapter 2 of the Preliminary EA presents information on forest species, age class representation; regeneration planned, and proposed changes for our roads system. Information on ruffed grouse, woodcock, deer and moose habitat will be incorporated into discussion on management indicator habitats (MIH), specifically review analysis on MIH 4. Chapter 1 of the preliminary EA outlines the scoping process including discussions with other agencies and tribes.

### **Comments Noted**

**Comment:** *I have read your management proposal, and it sounds good. I particularly like the idea of making some trees available to local sawmills. I'm sure they can use the wood, and the Service could gain a few dollars in the process. It seems like such a waste to let so many trees rot, and or become fuel for future fires.*

*Please keep me on your mailing list. William F. Cherwin*

**Comment:** *I believe that what you are proposing is correct and support it in its entirety. Management of the forest by the Forest Service is critical to the maintaining of the health of not only the forest, but also the inhabitants of the forest and society generally. Daniel H. Mundt*

**Comment:** *I think the Devils Trout project is a good thing. Our forests are dying off. They need to be harvested and replanted to become strong again. Brian Silence*

**Comment:** *Thanks for the information; it appears to be very thorough and well thought out. Anytime I see efforts to reduce the aspen and increase acres of pines it's got to be good. Robert Peterson*

**Comment:** *As president of the Devil Track Lake Association next year I would like to keep our board updated on anything going on around the lake area. Also would like to see the area on the trail cleaned up north of the Trout Lake Rd on the Gunflint Trail. Stephen Quaipe*

**Comment:** *We support the decision to manage these habitats with fire. Rick Horton, Ruffed Grouse Society*

**Comment:** *The Agency must perform an adequate alternatives analysis. The agency is obligated to study, develop and describe all reasonable alternatives. NEPA requires that a project analysis must discuss a range of alternatives to the proposed action and to "provid[e] a clear basis for choice among options." 40 C.F.R. § 1502.14; see also 42 U.S.C. § 4332(2)(E). "No major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means." *Environmental Defense Fund v. Corps of Engineers*, 492 F.2d 1123, 1135 (5th Cir. 1974) (emphasis added). An alternative may not be disregarded merely because it does not offer a complete solution to the problem. Further, courts have held that an alternative must be fully examined if it meets the purpose and need even if application of that alternative would require a change in law. Josh Davis, Sierra Club*